Contents of *Ecological Modelling*, Vol. 59

VOL. 59 NOS. 1/2 1 DECEMBER 1991

Significance of the dispersion coefficient in the stochastic modelling of pesticides transport in the unsaturated zone
D. Isabel and J.-P. Villeneuve (Canada) 1
Self- and mutual shading and competition effect on competing algal distributions: Biological implications of the model
U. Timm, J.M. Klinck and A. Okubo (USA, Denmark) 11
Simulation model of natural tropical forest dynamics
H. Bossel and H. Krieger (Germany) 37
A model of a grass sward continuously grazed to a constant mean height
N.J. Hutchings (UK) 73
Population dynamics of the western corn rootworm: formulation, validation, and analysis of a simulation model
N.C. Elliott and G.L. Hein (USA) 93
A model describing the predator–prey interaction between *Scolothrips longicornis* and *Tetranychus cinnabarinus* based upon the Leslie theory
T. Selhorst, D. Söndgerath and S. Weigand (Germany, Syria) 123

Book Reviews 139

VOL. 59 NOS. 3 15 DECEMBER 1991

An index of ecosystem diversity
Zhou Jizhong, Ma Shijun (Beijing, People's Republic of China) and Chen Changming (Changsha, People's Republic of China) 151
Qualitative reasoning about an ecological process: interpretation in hydroecology
F. Guerrin (Castanet-Tolosan, France) 165
Timing of spawning in largemouth bass: implications of an individual-based model
A.S. Trebitz (Oak Ridge, TN, USA) 203
Biological control of aquatic vegetation using grass carp: simulation of alternative strategies
C.R. Santha, W.E. Grant, W.H. Neill and R.K. Strawn (College Station, TX, USA) 229
Matrix model for tree population projection in a tropical rain forest of south-western Nigeria
J.S.A. Osho (Ibadan, Nigeria) 247
A mechanistic simulation to complement an empirical transition matrix model of acarine population dynamics
D.R. Clements, R. Harmsen (Kingston, Ont. Canada) and P.J. Clements (London, Ont. Canada) 257
Optimal translocation strategies for saving the Black Rhino
J.W. Hearne and J. Swart (Pietermaritzburg, South Africa) 279

Book Reviews 293